

## 10Gb/s Ultra-Wideband Wireless Transmission Based on Multi-Band Carrierless Amplitude Phase Modulation - DTU Orbit (09/11/2017)

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In this paper, for the first time, a record UWB transmission of 10Gb/s is experimentally demonstrated employing a multi-band approach of carrierless amplitude phase modulation (MultiCAP). The proposed solution complies with the restrictions on the effective radiated power established by both the United States Federal Communications Commission and the European Electronic Communications Committee, achieving a BER below the limit for a 7% overhead FEC of  $3.8 \cdot 10^{-3}$  up to respective wireless distances of 3.5m and 2m.

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